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STUDY OF THE ELASTIC PROPERTIES OF ROCKS IN THE
PECHENGA REGION OF THE KOLA PENINSULA AT HIGH
PRESSURES IN RELATION TO ITS DEEP STRUCTURE
[ISSLYEDOVANIYE UPBUGIKH SVOYSTV GORNYKH POROD
PECHENSKOGO RAYONA KOLSKOGO POLUOSTROVA PRI
VYSOKIKH DAVLYENIYAKH V SVYAZI S YEGD
GLUBINNYM STROYENIEM]

N Ye Galdin NASA Oct. 1970 48 p refs Transl into
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Contract NASw-2036)

(NASA-TT-F-13207) Avail NTIS CSCL08G

Elastic wave velocities were determined in rocks from the
Pechenga region of the Kola Peninsula, in cooperation with deep
seismic sounding studies of the area. The geological structure of
the region is discussed, as are the petrographic features of the
rocks in the Pechenga series. The data produced in laboratory
studies of velocity are used, together with field seismic data, as the
basis for a suggested structure for the region, a part of a deep,
linear depression deposited on the Archean basement in the
Proterozoic era.

Author

N71-11424-1 Scripta Technica Inc. Washington D C

EFFECT OF HIGH PRESSURE ON THE P-WAVE VELOCITY
IN GNEISSES AND CRYSTALLINE SCHISTS OF
NORTHWESTERN PART OF THE KOLA PENINSULA
[VLIYANIYE VSOKOGO DAVLENIYA NA SKOROST'
PRODOLNYKH VOLN V GNEYSAKH I KRISTALLICHESKIM
SLANTSAKH SEVERO-ZAPADNOY CHASTI KOLSKOGO
POLUOSTROVA]

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(Contract NASw-2036)

(NASA-TT F 13208) Avail NTIS CSCL08G

Three groups of rocks from the three characteristic sections
of the region were tested under laboratory conditions at up to
12,000 kg/sq cm. Petrographic characteristics and photomicrographs
of cross sections of the specimens are presented. Observed
reflecting boundaries of the area are correlated to P-wave velocities
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